



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,003	04/08/2004	Susanne Rathjen	03/056 NUT CIP 2	9302
38263	7590	01/26/2009		
PROPAT, L.L.C. 425-C SOUTH SHARON AMITY ROAD CHARLOTTE, NC 28211-2841				
EXAMINER				
CHAWLA, JYOTI				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
01/26/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/821,003

**Applicant(s)**

RATHJEN, SUSANNE

**Examiner**

JYOTI CHAWLA

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 05 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8,9,11-15 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8,9,11-15 and 21-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date \_\_\_\_\_
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 5, 2008 has been entered. Claims 8, 13, 21 and 25 have been amended. Claims 8, 9, 11-15, 21-25 are pending and examined in the application.

#### ***Continuation-in-Part Application***

##### ***Priority***

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original non-provisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 10/637,283 fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. Claims 8,9, 11-15 and 21-25 are drawn to an invention embodiment that contains a sweetener composition with a carbohydrate sweetener consisting essentially of a mixture of HFCS 42 and sucrose alone, said HFCS 42 and sucrose present in a weight ratio ranging from 20:80 to 80:20; and a binary high intensity sweetener composition consisting essentially of Acesulfame-K and N-[N-(3~3-dimethylbutyl)-L-a-aspartyl]-L-phenylalanine 1-methyl ester alone, said Acesulfame-K present in at least a 10:1 weight ratio in comparison to said N-[N-(3,3-

Art Unit: 1794

dimethylbutyl)-L-a-aspartyl]-L-phenylalanine 1-methyl ester, wherein said sweetener composition imparts a taste profile comparable to HFCS 55, and said binary high intensity sweetener composition provides the entire amount of high intensity sweetener within said sweetener composition. Application No. 10/637,283 fails to disclose the embodiments disclosed and claimed in current application 10/821,003; therefore, claims 8,9, 11-15 and 21-25 of the present continuation-in-part are not entitled to the benefit of the prior application.

***Oath /Declaration***

It is noted that application 10/637283, listed as pending has since been abandoned.

***Claim Rejections - 35 USC § 112 (First Paragraph)***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8-9, 11-15, 21-25 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a combination of carbohydrate and high intensity sweeteners, does not reasonably provide enablement for "binary high intensity sweetener" and *"said binary high intensity sweetener composition provides the entire amount of high intensity sweetener within said sweetener composition"*. Applicant's disclosure states "Surprisingly, it was observed that foodstuffs containing (i) at least one carbohydrate sweetener, e.g. either HFCS 55 and/or HFCS 42 and/or sucrose, along with (ii) a high intensity sweetener composition formed from Acesulfame-K and one of either aspartame, sucralose or Neotame® have a taste profile which is not significantly different from HFCS 55, with a significant caloric reduction" (Application publication paragraph 0016). The disclosure also states "In particularly advantageous Neotame®-based sweeteners, the carbohydrate sweetener *can be a mixture, particularly a mixture of HFCS 42 and sucrose. In such advantageous embodiments,*

*the HFCS 42 and sucrose may be present within the carbohydrate sweetener within exemplary weight ratios of 20:80 to 80:20.” (Application publication paragraph 0027)*

The specification does not provide adequate disclosure that the carbohydrate sweeteners can only be HFCS 42 and sucrose only, the disclosure provides an example. Further the disclosure also does not include any mention of the term “binary high intensity sweetener” and that the high intensity sweetener in the sweetening composition as disclosed is “the binary sweetener *consisting essentially of* Acesulfame-K and N-[N-(3~3-dimethylbutyl)-L-a-aspartyl]-L-phenylalanine 1-methyl ester” (also known as Neotame®). Thus applicant’s disclosure does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Claims 8-9, 11-15, 21-25 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims recite “binary high intensity sweetener” and “binary high intensity sweetener composition provides the entire amount of high intensity sweetener within said sweetener composition” which was not recited as claimed in the original disclosure. Applicant’s disclosure does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention as claimed.

***Claim Rejections - 35 USC § 112 (Second Paragraph)***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejection of claim 13 under 35 U.S.C. 112, second paragraph, for recitation of the trademark/trade name “Neotame®”, has been withdrawn in light of applicant’s amendments of 11/05/2008.

Art Unit: 1794

Claims 8, 9, 11-15 and 21-25 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8-9, 11-15 and 21-25 contain the term "binary high intensity sweetener". The term "*binary high intensity sweetener*" and "*said binary high intensity sweetener composition provides the entire amount of high intensity sweetener within said sweetener composition*" is not disclosed or defined by the specification. It is unclear whether the term refers to a precompiled or precombined sweetener or something else. It is unclear as to what is encompassed by said term "binary High intensity sweetener".

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(A) Rejection of claims 8-9, 11-15 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simon et al., in view of the combination of Calderas et al (US 6294214) and Ishida et al (US 6372279 B1) has been withdrawn based on applicant's amendments and remarks.

Art Unit: 1794

(B) Claims 8-9, 11-15 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pajor et al (US 6048 999) , hereinafter Pajor, in view of Horton et al (H1165), hereinafter Horton, Neotame® Ingredient Overview, hereinafter Neotame®-1, and Soft Drink Nutrition ,Simon et al., in view of the combination of Calderas et al (US 6294214) and Ishida et al (US 6372279 B1).

Regarding claims **8, 14, 21 and 25**, Pajor teaches of sweetener compositions that are suitable to be used in any foods, such as, foods, confectionery, pastry, beverages etc., (Column 2, lines 26-37 and Column 6, lines 28-30). Pajor also teaches that N-[N-(3,3-dimethylbutyl)-L-.alpha.-aspartyl]-L-phenylalanine 1-methyl ester or (Neotame®) compositions (Column 2, line 59 -63). Pajor also teaches that particles of N-[N-(3,3-dimethylbutyl)-L-.alpha.-aspartyl]-L-phenylalanine 1-methyl ester or (Neotame®) may be used in combination with natural as well as other high intensity sweeteners. Pajor further teaches that the sweeteners that may be employed include Acesulfame-K, sucrose (liquid and granulated), high fructose corn syrup (HFCS), high conversion corn syrup etc. and mixtures thereof (Column 3, lines 8-23), as is instantly claimed.

Regarding the combination of Neotame® with Acesulfame-K, sucrose and HFCS as recited in claims 8, 21 and 25, Pajor teaches that Neotame®, Acesulfame-K, sucrose and HFCS work synergistically (Column 3, lines 8-23). Thus, a combination of high intensity sweeteners as recited by the applicant was known at the time of the invention and it would have been obvious to one of ordinary skill in the art to combine one or more high intensity sweeteners with Neotame® to provide the entire amount of high intensity sweetener within the sweetener composition at least in order to achieve the desired sweetness profile.

Regarding the combination of Neotame® and Acesulfame-K and their relative proportions as recited in claims 8, **13, 21, 24** and 25 Pajor teaches that ratio of Neotame® to sweetener that may be used in the blend depends on the particular sweetener chosen (Column 5, lines 62-65). Specifically regarding the ratio of Neotame® to Acesulfame-K Pajor teaches 1:2.48 to 1:1497, which includes applicant's recited range for claims 8, 13, 21, 24 and 25.

Art Unit: 1794

Regarding the ratio of Neotame® to sucrose, Pajor teaches a ratio of 1:746 to 1:94115, which includes the proportion of carbohydrate sweetener component to high intensity component as recited by the applicant in claims **9, 12, 22 and 23**.

Regarding the limitation of carbohydrate sweetener consisting essentially of HFCS-42 and sucrose in the ratio of 20:80 to 80:20 as recited in claims **8, 11, 21, 25**, blends of sucrose and HFCS were known and used in foods at the time of the invention. Horton discloses that HFCS with different levels of fructose can be used in baked goods in varying amounts in place of sugar or sucrose. The reference further discloses that HFCS having 42% fructose (i.e., HFCS-42) is used in baking products where 10-30% sucrose in the baking product is replaced in baked goods, such as, white cakes (Column 1, lines 30-36), i.e., Horton discloses a blend of HFCS-42 and sucrose in the ratio of 10 to 30:90 to 70, which falls in applicant's recited range of 20:80 to 80:20 for the carbohydrate sweetener blend. Further, it is conventional in the art to manipulate sweetener amounts to obtain desired organoleptic properties. Therefore, it would have been a matter of routine determination for one of ordinary skill in the art at the time of the invention to modify the relative proportions of sweetener in the foods or beverages in order to optimize the amount of a recognized result effective variable, such as a carbohydrate sweetener to achieve a desirable taste, flavor and texture of the food or beverage may be identified through routine experimentation (MPEP 2144.05). To increase or decrease the amount of sweetener to either increase or reduce the sweet flavor of food is nothing more than achievement of expected results and does not impart patentable distinction to the claims, absent any clear and convincing evidence and/or arguments to the contrary.

Regarding claims **8, 21, 25**, Pajor is silent about equating the taste of combined sweetener including Neotame® to HFCS 55, as instantly claimed. It is known that HFCS 55 is a high fructose corn syrup with 55% fructose and 45% glucose and is a little sweeter as compared to sucrose and is most commonly used in beverages as a sweetener (as evidenced by HFCS-55 article). However, combinations of Neotame® with carbohydrate sweeteners including HFCS have been known in the art. Neotame®-1 reference discloses a combination of Neotame® with HFCS and also discloses that if



Art Unit: 1794

25% of HFCS is replaced with Neotame® blend (3.0ppm Neotame®), the taste profile imparted by the Neotame® and HFCS combination is comparable to Taste profile of HFCS alone (Page 1, figure 2). Therefore, combinations of Neotame® with carbohydrate and high intensity sweeteners, especially with sugar syrups, like high fructose corn syrup, where the combination had the taste profile of HFCS were known at the time of the invention.

Regarding the amount of sweetener in food, as recited by the applicant in claims 15 and 21, Pajor teaches that the amount of sweetener in a food composition can be varied based on the desired flavor, taste and food or beverage type. Pajor teaches of combination of sweeteners, as discussed above. Regarding the blend ratio of the sweeteners, Pajor's experimental data teaches that the blend of Neotame® with Acesulfame-K and Neotame® with sucrose in an edible solution where the total weight sweeteners in the edible solution falls in the ratio recited by the applicant (Column 8, Table 2 and Column 11, table 4). Further beverages having sweeteners in the proportion recited in claims 15 and 21 were known at the time as taught by Soft Drink Nutrition on Coca cola Blak (third item on the table), which has 12 grams of carbohydrates in a 240 ml serving which amounts to about 4% by weight of the beverage. Further, it is conventional in the art to manipulate sweetener amounts to obtain desired organoleptic properties. Therefore, it would have been a matter of routine determination for one of ordinary skill in the art at the time of the invention to modify the relative proportions of sweetener in the foods or beverages in order to optimize the taste, flavor and texture of the food or beverage and altering the amount of sweetener in a food or beverage would not impart patentable distinction to the claims, absent any clear and convincing evidence and/or arguments to the contrary.

Thus, all of the components of the instantly claimed invention are well known and used for their art-recognized function to obtain expected results. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to use the combination of aspartame, Acesulfame-K, sucrose and HFCS as taught by Pajor, with HFCS and sucrose in the ratio as disclosed by Horton because the use and

Art Unit: 1794

manipulation of HFCS and well-known sweeteners, such as sucrose, is conventional in the sweetener art. In the absence of a showing of unexpected results, the claimed components are used for no more than their art-recognized function to obtain no more than expected results. The prior art clearly teaches the claimed components as conventional in the art. It is conventional in the art to manipulate sweetener blends to obtain desired results having a specific taste profile.

Therefore, claims 8, 9, 11-15, 21-25 are unpatentable over Pajor, in view of Horton, Neotame®-1 and Soft Drink Nutrition.

### ***Response to Arguments***

Applicant's arguments filed March 31, 2008 have been fully considered but are moot in view of new grounds of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI CHAWLA whose telephone number is (571)272-8212. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JC/  
Examiner  
Art Unit 1794

/KEITH D. HENDRICKS/

Supervisory Patent Examiner, Art Unit 1794